

# Office of the State Actuary

August 14, 2006

#### **CONFIDENTIAL MATERIALS**

Via e-mail

Steve Nelsen, Executive Director LEOFF Plan 2 Retirement Board P.O. Box 40918 Olympia, Washington 98504-40918

**RE: DEFERRED COMPENSATION** 

Dear Steve:

This letter presents the results of pricing a one percent increase in the salaries of the members of the Law Enforcement Officers' and Fire Fighters' Plan 2 (LEOFF 2). This letter can be used for background material for future consideration of the cost of the three options proposed in the Deferred Compensation presentation by Greg Deam during the July 26, 2006 LEOFF 2 Board meeting. This letter presents an estimate of the increase in contributions paid by the members, employers and state per one percent of increase in salary resulting from any of the three options. More likely than not, there would not be an increase in the LEOFF 2 contribution rates if LEOFF 2 salaries increased uniformly, but it is possible a contribution rate increase could result from legislation of this nature.

## **Members Impacted**

Fax: 360.586.8135

TDD: 1.800.635.9993

The impact on members is dependent on the type of legislation proposed. For members whose salaries do increase as a result of some future legislation, the affect to those members would be more dollars paid in contributions and higher final average salaries resulting in larger retirement benefits.

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#### **Actuarial Determinations**

Since many of the LEOFF 2 retirement benefits are based on salary, increasing all the members' salaries will increase the present value of their fully projected benefits. Likewise, the present value of their future salaries would increase at the same rate. Thus, contribution rates will not change. Since contributions are collected as a percent of salary, there would be an increase in the total contributions collected. The fiscal impact will depend on the amount of the increase in covered payroll. We assume that the current contribution rate will still apply, it will just apply to a greater payroll.

As a result of the higher salaries of one percent, the increase in pension plan funding expenditures per one percent of increase in salary of LEOFF 2 members is projected to be:

Costs (in Millions) 2007-2009 State: General Fund	LEOFF 2 1% Salary Increase 0.9
Non-General Fund	0.0
Total State	0.9
Local Government Total Employer	1.4 2.3
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Total Employee	2.3
2009-2011 State:	
General Fund Non-General	1.1
Fund	<u>0.0</u>
Total State	1.1
Local Government	<u>1.7</u>
Total Employer	2.8
Total Employee	2.8
2007-2032 State:	
General Fund	25.9
Non-General Fund	0.0
Total State	25.9
Local Government	<u>38.8</u>
Total Employer	64.7
Total Employee	64.7

#### **Assumptions**

We assumed that salaries would increase uniformly across the plan. For example, if the annual payroll is \$1,300 million, a 1% increase would add \$13 million to the payroll. If the member rate is 8%, this would result in an extra \$1 million in member contributions (\$13 million times 8%). We assumed salaries would increase immediately for all plan members, not just during a member's final average salary period. If salary increases were negotiated for only a member's final average salary period, contribution rates could increase. We assume that the current split of the contribution rate between the state, local employer, and member would still apply.

#### **Pricing Method and Data**

We calculated the dollar value of a one percent increase in contributions that would result from a one percent increase in LEOFF 2 salaries. We took one percent of the LEOFF 2 projected contribution rates and proceeded as if there was a contribution rate increase equal to that number of basis points, totaling about 16 basis points for members, employers and the state, per year. We used the preliminary results of the 2005 valuation and the data for LEOFF 2 from that valuation.

## **Sensitivity Analysis**

We tested the sensitivity of contribution rates on the worst case scenario in which every LEOFF 2 member received additional salary increases late in their careers. We assumed for this exercise that the present value of future salaries did not increase as a result of the short term increases in salaries during members' final average salary periods. Under this worst case scenario, for every increase of one percent of final average salary, LEOFF 2 contribution rates would increase by 41 basis points.

We do not believe contribution rates will increase as a result of LEOFF 2 salaries increasing uniformly. It is possible that members could negotiate for benefit packages that increase salaries only during their final average salary period. This would result in increased pension benefits that would not have been funded fully over the course of the members' careers. If a large enough portion of plan members negotiated for benefits packages of this nature, contribution rates would increase for LEOFF 2.

#### **Disclosures**

This communication is for the use of the LEOFF 2 Board for the sole purpose of determining which Deferred Compensation option, if any, they would like to pursue. The fiscal results contained herein are not based on pricing any option in particular, but are intended to give the board an estimate of the cost per one percent of salary inflation. The increase in salary that might result from a particular option chosen by the board was not considered.

This letter has been prepared exclusively for the LEOFF 2 Board for a specific and limited purpose as stated above. Any third party recipient of this work product is advised to seek professional guidance concerning its content and interpretation and should not rely upon this communication in absence of such professional guidance. Any distribution of this letter must be in its entirety, unless prior consent is obtained from the Office of the State Actuary.

The undersigned, with actuarial credentials, meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein. We appreciate the opportunity to provide this information and would be happy to answer any questions.

Sincerely,

Marty McCaulay, FSA, MAAA, EA

Philip Mont M: Caulay

Senior Pension Actuary

Attachments: Statement of Data and Assumptions Used in Preparing the Fiscal Costs and Glossary of Actuarial Terms

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# STATEMENT OF DATA AND ASSUMPTIONS USED IN PREPARING THE FISCAL COSTS:

The costs presented in this letter are based on our understanding of the request as well as generally accepted actuarial standards of practice including the following:

- 1. Costs were developed using the same membership data, methods, assets and assumptions as those used in preparing the preliminary September 30, 2005 actuarial valuation report of the Law Enforcement Officers' and Fire Fighters' Retirement System.
- 2. As with the costs developed in the actuarial valuation, the emerging costs of LEOFF 2 will vary from those presented in the valuation report or this letter to the extent that actual experience differs from that projected by the actuarial assumptions.
- 3. The analysis of this request does not consider any other proposed changes to the system. The combined effect of several changes to the system could exceed the sum of each proposed change considered individually.
- 4. These fiscal costs are intended for use only during the 2006 Interim.
- 5. LEOFF 2 utilizes the Aggregate Funding Method. The cost of LEOFF 2 is spread over the average working lifetime of the current active LEOFF 2 members.

#### **GLOSSARY OF ACTUARIAL TERMS:**

**Actuarial Present Value:** The value of an amount or series of amounts payable or receivable at various times, determined as of a given date by the application of a particular set of Actuarial Assumptions (i.e. interest rate, rate of salary increases, mortality, etc.)

**Aggregate Funding Method:** The Aggregate Funding Method is a standard actuarial funding method. The annual cost of benefits under the Aggregate Method is equal to the normal cost. The method does not produce an unfunded liability. The normal cost is determined for the entire group rather than an individual basis.

**Projected Benefits:** Pension benefit amounts which are expected to be paid in the future taking into account such items as the effect of advancement in age as well as past and anticipated future compensation and service credits.

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